

Claims

- [c1] 1. A user interface comprising:
a visible window displaying program information of a plurality of program cells in an electronic program guide (EPG) grid; and
a visual indicator in the visible window, the visual indicator being moved from a current position in a current row to a next position in response to one of a move right user command and a move left user command, the next position corresponding to a program cell in the plurality of program cells, said program cell being in another row.
- [c2] 2. The user interface of claim 1 wherein when the move right or move left command is performed within rows currently displayed in the visible window, a commutativity property is achieved.
- [c3] 3. The user interface of claim 1 wherein the visual indicator comprises:
an information line being moved in response of the user command, the information line intersecting the plurality of program cells.
- [c4] 4. The user interface of claim 3 wherein the information line is moved to align with the next position corresponding to start of the program cell.
- [c5] 5. The user interface of claim 4 wherein a first boundary at a program increment is determined, the first boundary occurring at least a minimum display period after or before the next position if the next position is outside the visible window or less than the minimum display period from one of end and start of the visible window; and
the visible window is scrolled such that the first boundary is at one of the end and the start of the visible window.
- [c6] 6. The user interface of claim 3 wherein points of new information and points of information loss are determined, the points of new information and the points of information loss being at start and end, respectively, of the program cells for the right move command, the points of new information and the points of information loss being at the end and the start, respectively, of the program cells for the left move command; and

the next position being determined as a latest point of the points of new information that occurs before an earliest point of the points of information loss for the right move command, the next position being at a latest point of the points of information loss for the left move command.

- [c7] 7. The user interface of claim 6 wherein the information line is moved to the next position; and
the visible window is scrolled if the next position is outside the visible window or less than a minimum display period from one of end and start of the visible window.
- [c8] 8. The user interface of claim 7 wherein the information line is moved to an alternative point if the next position is outside the visible window, the alternative point being a last point of the points of new information that precedes end of the visible window by at least a minimum display period for a right move command, the alternative point being a point of new information that is later than start of the visible window by at least the minimum display period.
- [c9] 9. The user interface of claim 1 wherein the visual indicator comprises:
a highlighted program cell being moved in response to the user command; and
wherein
if the user command is a right move command, the visible window is scrolled to the right such that start of the visible window does not move past end of any one of the plurality of program cells which is not initially visible in the visible window; and
if the user command is the left move command, the visible window is scrolled to the left such that end of the visible window does not move past start of any one of the plurality of program cells which is not initially visible in the visible window.
- [c10] 10. The user interface of claim 1 further comprising:
a supplementary area to display supplementary information, the supplementary information being associated with the program cell.

- [c11] 11. A method comprising:
displaying program information of a plurality of program cells in a visible window, the plurality of program cells being in an electronic program guide (EPG) grid; and
moving a visual indicator in the visible window from a current position in a current row to a next position in response to one of a move right user command and a move left user command, the next position corresponding to a program cell in the plurality of program cells, said program cell being in another row.
- [c12] 12. The method of claim 11 wherein moving a visual indicator comprises performing one of the move right command and a move left command within rows currently displayed in the visible window to achieve a commutativity property.
- [c13] 13. The method of claim 12 wherein moving a visual indicator comprises: moving an information line in response of the user command, the information line intersecting the plurality of program cells.
- [c14] 14. The method of claim 13 wherein moving the information line comprises: moving the information line to align with the next position corresponding to start of the program cell.
- [c15] 15. The method of claim 14 wherein moving the information line further comprises:
determining a first boundary at a program increment that occurs at least a minimum display period after or before the next position if the next position is outside the visible window or less than the minimum display period from one of end and start of the visible window; and
scrolling the visible window such that the first boundary is at one of the end and the start of the visible window.
- [c16] 16. The method of claim 13 wherein moving the information line comprises: determining points of new information and points of information loss, the points of new information and the points of information loss being at start and end, respectively, of the program cells for the right move command, the points

of new information and the points of information loss being at the end and the start, respectively, of the program cells for the left move command; and determining the next position, the next position being a latest point of the points of new information that occurs before an earliest point of the points of information loss for the right move command, the next position being at a latest point of the points of information loss for the left move command.

[c17] 17. The method of claim 16 wherein moving the information line further comprises:
moving the information line to the next position; and
scrolling the visible window if the next position is outside the visible window or less than a minimum display period from one of end and start of the visible window.

[c18] 18. The method of claim 16 wherein moving the information line further comprises:
moving the information line to an alternative point if the next position is the visible window, the alternative point being a last point of the points of new information that precedes end of the visible window by at least a minimum display period for a right move command, the alternative point being a point of new information that is later than start of the visible window by at least the minimum display period.

[c19] 19. The method of claim 11 wherein moving the visual indicator comprises:
moving a highlighted program cell in response to the user command;
if the user command is a right move command, scrolling the visible window to the right such that start of the visible window does not move past end of any one of the plurality of program cells which is not initially visible in the visible window; and
if the user command is the left move command, scrolling the visible window to the left such that end of the visible window does not move past start of any one of the plurality of program cells which is not initially visible in the visible window.

[c20] 20. The method of claim 11 further comprising:

displaying supplementary information in a supplementary area, the supplementary information being associated with the program cell.

- [c21] 21. An article of manufacture comprising:
a machine-accessible medium including data that, when accessed by a machine, causes the machine to perform operations comprising:
displaying program information of a plurality of program cells in a visible window, the plurality of program cells being in an electronic program guide (EPG) grid; and
moving a visual indicator in the visible window from a current position in a current row to a next position in response to one of a move right user command and a move left user command, the next position corresponding to a program cell in the plurality of program cells, said program cell being in another row.
- [c22] 22. The article of manufacture of claim 21 wherein the data causing the machine to perform moving a visual indicator comprises data that, when accessed by machine, causes the machine to perform operations comprising:
performing one of the move right command and a move left command within rows currently displayed in the visible window to achieve a commutativity property.
- [c23] 23. The article of manufacture of claim 22 wherein the data causing the machine to perform moving a visual indicator comprises data that, when accessed by the machine, causes the machine to perform operations comprising:
moving an information line in response of the user command, the information line intersecting the plurality of program cells.
- [c24] 24. The article of manufacture of claim 23 wherein the data causing the machine to perform moving the information line comprises data that, when accessed by the machine, causes the machine to perform operations comprising:
moving the information line to align with the next position corresponding to start of the program cell.

- [c25] 25. The article of manufacture of claim 24 wherein the data causing the machine to perform moving the information line further comprises data that, when accessed by the machine, causes the machine to perform operations comprising:
determining a first boundary at a program increment that occurs at least a minimum display period after or before the next position if the next position is outside the visible window or less than the minimum display period from one of end and start of the visible window; and
scrolling the visible window such that the first boundary is at one of the ends and the start of the visible window.
- [c26] 26. The article of manufacture of claim 23 wherein the data causing the machine to perform moving the information line comprises data that, when accessed by the machine, causes the machine to perform operations comprising:
determining points of new information and points of information loss, the points of new information and the points of information loss being at start and end, respectively, of the program cells for the right move command, the points of new information and the points of information loss being at the end and the start, respectively, of the program cells for the left move command; and
determining the next position, the next position being a latest point of the points of new information that occurs before an earliest point of the points of information loss for the right move command, the next position being at a latest point of the points of information loss for the left move command.
- [c27] 27. The article of manufacture of claim 26 wherein the data causing the machine to perform moving the information line further comprises data that, when accessed by the machine, causes the machine to perform operations comprising:
moving the information line to the next position; and
scrolling the visible window if the next position is outside the visible window or less than a minimum display period from one of end and start of the visible window.

- [c28] 28. The article of manufacture of claim 26 wherein the data causing the machine to perform moving the information line further comprises data that, when accessed by the machine, causes the machine to perform operations comprising:
moving the information line to an alternative point if the next position is the visible window, the alternative point being a last point of the points of new information that precedes end of the visible window by at least a minimum display period for a right move command, the alternative point being a point of new information that is later than start of the visible window by at least the minimum display period.
- [c29] 29. The article of manufacture of claim 21 wherein the data causing the machine to perform moving the visual indicator comprises data that, when accessed by the machine, causes the machine to perform operations comprising:
moving a highlighted program cell in response to the user command;
if the user command is a right move command, scrolling the visible window to the right such that start of the visible window does not move past end of any one of the plurality of program cells which is not initially visible in the visible window; and
if the user command is the left move command, scrolling the visible window to the left such that end of the visible window does not move past start of any one of the plurality of program cells which is not initially visible in the visible window.
- [c30] 30. The article of manufacture of claim 21 wherein the data further comprises data that, when accessed by the machine, causes the machine to perform operations comprising:
displaying supplementary information in a supplementary area, the supplementary information being associated with the program cell.
- [c31] 31. A system comprising:
a processor; and
a memory coupled to the processor, the memory containing program code that,

when executed by the processor, causes the processor to:
display program information of a plurality of program cells in a visible window,
the plurality of program cells being in an electronic program guide (EPG) grid.
and
move a visual indicator in the visible window from a current position in a
current row to a next position in response to one of a move right user command
and a move left user command, the next position corresponding to a program
cell in the plurality of program cells, said program cell being in another row.

[c32] 32. The system of claim 31 wherein the program code causing the processor to
move a visual indicator comprises program code that, when executed by the
processor, causes the processor to:
performing one of the move right command and a move left command within
rows currently displayed in the visible window to achieve a commutativity
property.

[c33] 33. The system of claim 32 wherein the program code causing the processor to
move a visual indicator comprises program code that, when executed by the
processor, causes the processor to:
move an information line in response of the user command, the information line
intersecting the plurality of program cells.

[c34] 34. The system of claim 33 wherein the program code causing the processor to
move the information line comprises program code that, when executed by the
processor, causes the processor to:
move the information line to align with the next position corresponding to start
of the program cell.

[c35] 35. The system of claim 34 wherein the program code causing the processor to
move the information line further comprises program code that, when executed
by the processor, causes the processor to:
determine a first boundary at a program increment that occurs at least a
minimum display period after or before the next position if the next position is
outside the visible window or less than the minimum display period from one of
end and start of the visible window; and

scroll the visible window such that the first boundary is at one of the ends and the start of the visible window.

[c36] 36. The system of claim 33 wherein the program code causing the processor to move the information line comprises program code that, when executed by the processor, causes the processor to:
determine points of new information and points of information loss, the points of new information and the points of information loss being at start and end, respectively, of the program cells for the right move command, the points of new information and the points of information loss being at the end and the start, respectively, of the program cells for the left move command; and
determine the next position, the next position being a latest point of the points of new information that occurs before an earliest point of the points of information loss for the right move command, the next position being at a latest point of the points of information loss for the left move command.

[c37] 37. The system of claim 36 wherein the program code causing the processor to move the information line further comprises program code that, when executed by the processor, causes the processor to:
move the information line to the next position; and
scroll the visible window if the next position is outside the visible window or less than a minimum display period from one of end and start of the visible window.

[c38] 38. The system of claim 36 wherein the program code causing the processor to move the information line further comprises program code that, when executed by the processor, causes the processor to:
move the information line to an alternative point if the next position is outside the visible window, the alternative point being a last point of the points of new information that precedes end of the visible window by at least a minimum display period for a right move command, the alternative point being a point of new information that is later than start of the visible window by at least the minimum display period.

[c39] 39. The system of claim 31 wherein the program code causing the processor to

move the visual indicator comprises program code that, when executed by the processor, causes the processor to:

- move a highlighted program cell in response to the user command;
- if the user command is a right move command, scroll the visible window to the right such that start of the visible window does not move past end of any one of the plurality of program cells which is not initially visible in the visible window;
- and
- if the user command is the left move command, scroll the visible window to the left such that end of the visible window does not move past start of any one of the plurality of program cells which is not initially visible in the visible window.

[c40]

40. The system of claim 31 wherein the program code further comprises program code that, when executed by the processor, causes the processor to: display supplementary information in a supplementary area, the supplementary information being associated with the program cell.